

**IN THE CLAIMS**

Please amend the claims as follows:

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1-13. (Canceled)

14. (Previously Presented) A programmer for a user to program a pulse generator to detect a clinical rhythm and selectively apply therapy for the detected clinical rhythm, comprising:

a first module for receiving a user-selection of a clinical rhythm, wherein the clinical rhythm is associated with one or more available detection enhancements, and the first module is preprogrammed to provide a selection of at least one detection enhancement from the one or more available detection enhancements; and

a second module for receiving a user-provided selection to modify the selection of the at least one detection enhancement.

15. (Previously Presented) The programmer of claim 14, wherein the at least one detection enhancement has at least one parameter, the first module is preprogrammed to provide a setting for the at least one parameter for the at least one detection enhancement, and the second module is used to receive a user-provided selection to modify the setting for the at least one parameter.

16. (Previously Presented) The programmer of claim 14, further comprising a communication module for communicating with a pulse generator to program the pulse generator with the at least one detection enhancements.

17. (Previously Presented) The programmer of claim 14, further comprising a programmer screen, wherein the second module provides a number of screen displays on the programmer screen, and the number of screen displays are layered such that a first screen provides a capability to activate the at least one detection enhancement which is seeded with at least one parameter,

and a second screen provides a capability to change the at least one parameter for the at least one detection enhancement.

18. (Withdrawn) A programmer, comprising:

a selection module for receiving a selection of a clinical rhythm from a user, wherein the clinical rhythm is associated with at least one detection enhancement that includes at least one parameter, wherein artificial intelligence provides a setting for the at least one parameter for the at least one detection enhancement;

a parameter modification module for receiving a user input to change the setting for the at least one parameter; and

a communication module for communicating with a pulse generator to program the pulse generator with the selected clinical rhythm and the associated at least one detection enhancement.

19. (Withdrawn) The programmer of claim 18, wherein the selection module provides a capability to select a number of tachyarrhythmia zones that are associated with the at least one parameter.

20. (Withdrawn) The programmer of claim 19, wherein the parameter modification module provides the capability to change detection parameters for the number of tachyarrhythmia zones.

21. (Withdrawn) The programmer of claim 19, wherein the parameter modification module provides the capability to change therapy parameters for the number of tachyarrhythmia zones.

22. (Withdrawn) The programmer of claim 18, wherein the parameter modification module provides at least one indicator for indicating whether a changed parameter has been programmed in the pulse generator.

23. (Withdrawn) The programmer of claim 18, wherein the artificial intelligence tracks parameter interaction among the set parameters and the changed parameters, and provides at least one warning indicator for at least one parameter interaction.

24. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes a V Rate > A Rate enhancement for delivering therapy when a detected ventricular rate is determined to be greater than a detected atrial rate.

25. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes an AFib Rate Threshold enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be faster than a threshold.

26. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes a Stability enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be unstable.

27. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes an Onset enhancement for inhibiting a therapy when a detected cardiac rate is determined to increase gradually.

28. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes a Shock If Unstable enhancement when a ventricular rhythm is determined to be unstable.

29. (Withdrawn) The programmer of claim 18, wherein the at least one detection enhancement includes a Sustained Rate Duration (SRD) enhancement for overriding an inhibit therapy enhancement when a detected rate continues throughout a programmed time period.

30. (Withdrawn) The programmer of claim 18, wherein the at least one parameter includes at least one cardiac rhythm parameter that indicates when the at least one detection enhancement for the selected clinical rhythm applies.

31. (Withdrawn) A programmer for a user to program a pulse generator to detect a clinical rhythm and apply therapy for the detected clinical rhythm, comprising:

a communications module for communicating with ~~a pulse~~ the pulse generator;  
control logic for programming the pulse generator using the communications module, wherein the control logic is adapted to program the pulse generator to detect and provide therapy for at least one clinical rhythm, to program the pulse generator with at least one detection enhancement associated with the at least one clinical rhythm, and to program the pulse generator with at least one parameter for the at least one detection enhancement; and

a display connected to the control logic to provide a number of screen displays used by a user to select the at least one detection enhancement from a number of available detection enhancements associated with the at least one clinical rhythm.

32. (Withdrawn) The programmer of claim 31, wherein the at least one detection enhancement is automatically seeded with a value for the at least one parameter, and the number of screen displays are used by the user to change the value for the at least one parameter.

33. (Withdrawn) The programmer of claim 32, wherein the number of screen displays are layered such a first screen display provides a the user with the ability to select the at least one detection enhancement, and a second screen provides the user with the ability to change the value for the at least one parameter.

34. (Withdrawn) The programmer of claim 33, wherein the first screen includes a number of tachyarrhythmia zones, and the number of tachyarrhythmia zones ranges between one and three zones as determined by a user input.

35. (Withdrawn) The programmer of claim 34, wherein each of the number of tachyarrhythmia zones includes a detection button, and selecting the detection button displays the second screen used to change detection parameters for at least one of the number of tachyarrhythmia zones.

36. (Withdrawn) The programmer of claim 34, wherein each of the number of tachyarrhythmia zones includes a therapy button, and selecting the therapy button displays the second screen used to change therapy parameters for the number of tachyarrhythmia zones.

37. (Withdrawn) The programmer of claim 33, wherein the first screen displays detection enhancement rhythm discrimination categories.

38. (Withdrawn) The programmer of claim 33, wherein the first screen provides an ECG display.

39. (Withdrawn) The programmer of claim 31, wherein the at least one detection enhancement includes at least one inhibit therapy enhancement for inhibiting the therapy for the at least one clinical rhythm.

40. (Withdrawn) The programmer of claim 39, wherein the at least one detection enhancement further includes at least one override enhancement for overriding the inhibit therapy enhancement.

41. (Withdrawn) The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes an AFib Rate Threshold enhancement for inhibiting ventricular therapy when a detected atrial rhythm is faster than a threshold.

42. (Withdrawn) The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes a Stability enhancement for inhibiting ventricular therapy when a detected atrial rhythm is determined to be unstable.

43. (Withdrawn) The programmer of claim 40, wherein the at least one inhibit therapy enhancement includes an Onset enhancement for inhibiting a therapy when a detected rate increases gradually.

44. (Withdrawn) The programmer of claim 40, wherein the at least one override inhibit enhancement includes a V Rate > A Rate enhancement for delivering therapy when a detected ventricular rate is greater than a detected atrial rate.

45. (Withdrawn) The programmer of claim 40, wherein the at least one override inhibit enhancement includes a Shock if Unstable enhancement when a ventricular rhythm is determined to be unstable.

46. (Withdrawn) The programmer of claim 40, wherein the at least one override inhibit enhancement includes a Sustained Rate Duration (SRD) enhancement for overriding an inhibit therapy enhancement when a detected rate continues throughout a programmed time period.